

**Internal Business Process**

**Objective:** Minimize Impact of the Aging Plant

**Initiative:** Implement the plan for improved pulverizer reliability and output capacity.

The uprate of the units, coupled with the lower quality of coal available on the market, has resulted in an increased demand on the pulverizers. These demands affected our pulverizer availability and capacity.

**Improve Pulverizer Availability**

Pulverizer availability improvements that have been completed:

- Increase the annual maintenance budget for pulverizer repairs from \$1M/yr in the past years to \$2M/yr.
- Repair and replace all eroded and damaged parts during each overhaul.
- Increase warehouse inventory of parts.
- Replace worn out stationary throats with B&W counterclockwise rotating throats.
- Increase pulverizer maintenance during scheduled major Unit outages.
- Keep better and more detailed maintenance records of pulverizer maintenance history.
- Improve tooling for repairs
- Increase the manpower on the pulverizers from one to two shifts per day, when a pulverizer is down for a major overhaul.

**The above improvements have resulted in increased pulverizer availability.**

Pulverizer improvements that are still being evaluated:

- Consider the purchase of asymmetrical tires that have a thicker iron surface at the wear area of the tire for longer life.
- Consider the purchase of Magotteaux Tires and Bowl Segments, the tires and bowl segments have a ceramic material imbedded in the iron, the manufacturer claims at least twice the wear life. (Cost of 131k compared to 87k per mill that we currently spend).

**Improve Pulverizer Capacity**

Additional options, if required, have been discussed with no firm decisions made:

- Install and test low profile tires - \$250k/mill.
- Install and test rotating classifiers - extensive modifications required and expensive. Industry opinion varies on their effectiveness.
- Test and install adjustable classifier vanes - \$95k/mill.